



## CITY OF LODI

## COUNCIL COMMUNICATION

**AGENDA TITLE:** Traffic Resolution Amendment - Approve Speed Limits on Lodi Avenue, from Beckman Road to Guild Avenue, and on Guild Avenue, from Lodi Avenue to Victor Road

**MEETING DATE:** January 20, 1993

**PREPARED BY:** Public Works Director

**RECOMMENDED ACTION:** That the City Council adopt a resolution amending the Traffic Resolution #87-163 to approve speed limits on Lodi Avenue, from Beckman Road to Guild Avenue, and on Guild Avenue, from Lodi Avenue to Victor Road.

**BACKGROUND INFORMATION:** Public Works staff recently updated engineering and traffic studies for seven streets. These studies are performed following State of California Department of Transportation (Caltrans) guidelines in accordance with California Vehicle Code Section 40802.

Based on the Vehicle Code Section 40802, in order to use radar enforcement, it is necessary to conduct engineering and traffic studies every five years on "non-local" streets. "Non-local" streets are the collector and arterial streets shown on the Federal Aid System Maps. The engineering and traffic studies include measurements of prevailing speeds by a radar survey, review of unexpected conditions to the driver, and accident data.

Five of the seven streets have no changes to existing speed limits and do not need City Council approval. These five streets are Beckman Road, Lower Sacramento Road, Mills Avenue, Victor Road and Vine Street. The existing posted speed limits are shown on the attached map.

One of the two street segments that needs Council approval is Guild Avenue, from Lodi Avenue to Victor Road, which was recently constructed and does not have an existing speed zone. The other street segment is Lodi Avenue, from Beckman Road to Guild Avenue, which has an existing speed zone of 35 mph from Beckman Road to 650 feet west of Guild Avenue. This easterly segment of Lodi Avenue was also recently constructed.

Currently, Lodi Avenue and Guild Avenue connect creating an "L" intersection with a centerline striped through the intersection. There are 10 mph advisory speed limit signs posted at the intersection. Staff requests City Council approve 40 mph speed zones on both street segments based on the 85th percentile speeds observed in the

APPROVED

THOMAS A. PETERSON  
City Manager



recycled paper

CC-1

Traffic Resolution Amendment - Approve Speed Limits on Lodi Avenue, from Beckman Road to Guild Avenue, and on Guild Avenue, from Lodi Avenue to Victor Road  
January 20, 1993  
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field (see attached narratives and engineering and traffic surveys). It is not recommended to further reduce the speed zones due to unexpected conditions or accident records. If City Council changes the recommended limits, those street segments will not be radar enforceable.

FUNDING: Funding to be provided by the Street Maintenance account.



Jack L. Ronsko  
Public Works Director

Prepared by Paula J. Fernandez, Associate Traffic Engineer

JLR/PJF/lm

Attachments

cc: City Attorney  
Police Chief  
Street Superintendent

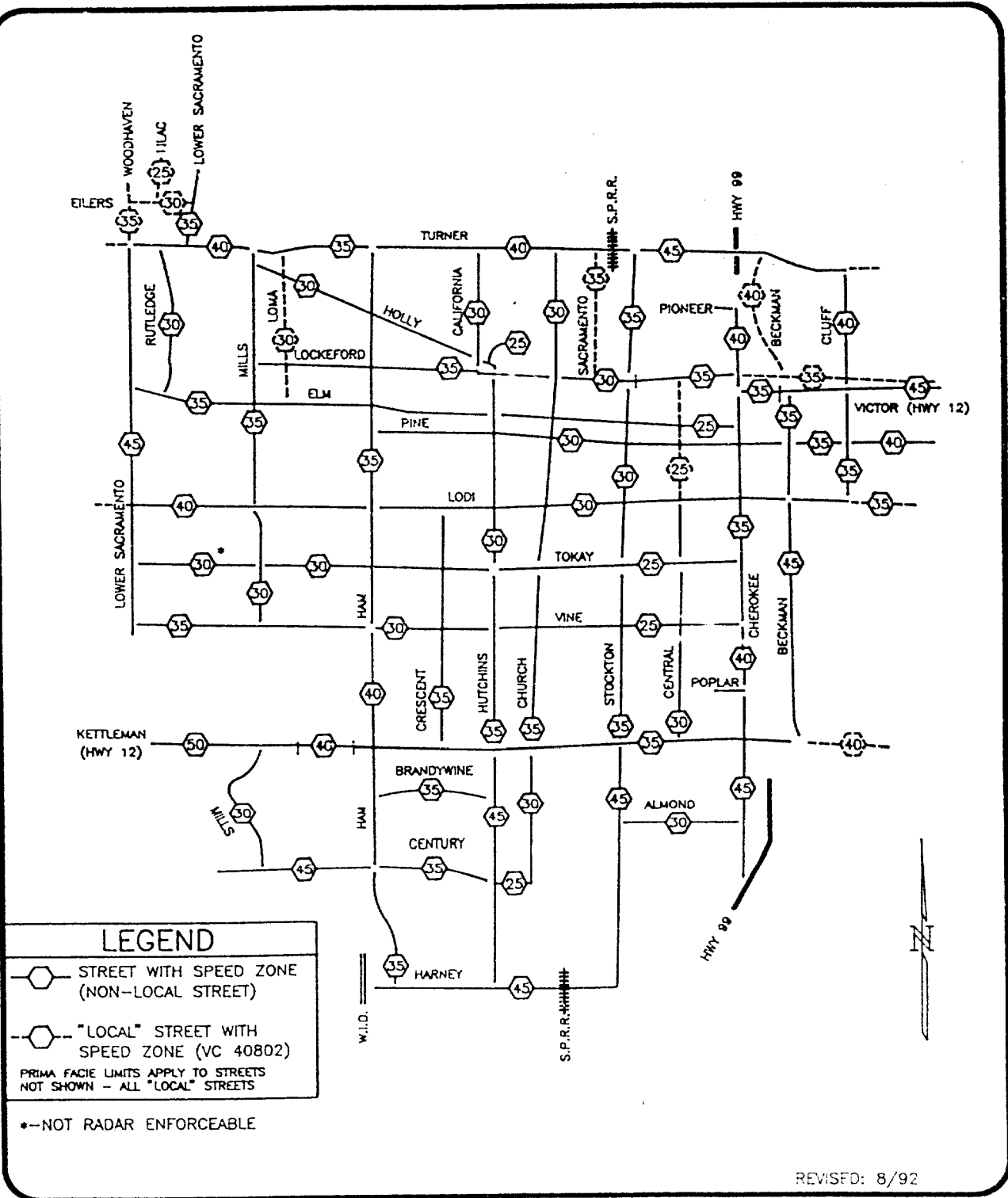
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# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## POSTED SPEED LIMITS



REVISED: 8/92

SP00M.DWG #15

January 1993

SPEED ZONE REPORT - Lodi Avenue

° REFERENCE - Speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802(b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manual.

° STUDY

Important factors to consider in determining the speed limit most appropriate to facilitate the orderly movement of traffic and which is reasonably safe are prevailing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit which is both reasonable and effective. Speed limits should normally be established at the first five mile per hour increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgement may indicate the need for a further reduction of 5 miles per hour.

Twelve radar surveys were performed and the 85th percentile ranged from 32 to 44 mph as shown below:

<u>Lodi Avenue Segment</u>	<u>Eastbound</u>	<u>Westbound</u>
West City Limits - Ham Lane	41-42 mph	41-42 mph
Ham Lane - Beckman Road	32-34 mph	33-34 mph
Beckman Road - Guild Avenue	42-44 mph	40-41 mph

Unexpected Conditions

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

There are no unexpected conditions used to further reduce the speed limit.

Accidents

Accident records of the two most recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM) and ranged from 0 to 7.6 ACC/MVM. The latest average city-wide accident rate is 4.3 ACC/MVM.

SPEED ZONE REPORT - Lodi Avenue  
Page 2

- ° RECOMMENDATION - The following posted speed limits are appropriate:

West City Limit to Ham Lane and Ham Lane to Beckman Road

There are no changes from the existing posted speed limit for the above segments. The proposed speed limits are based on the 85th percentile speeds observed in the field. It is not recommended to further reduce the speed zones due to unexpected conditions or accident data.

Beckman Road to Guild Avenue

Based on the 85th percentile speeds observed in the field, a 40 mph speed zone is recommended. The easterly portion of Lodi Avenue (650 feet west of Guild Avenue to Guild Avenue) was recently constructed. The accident rate has decreased from the 7.2 ACC/MVM (1988 speed survey) to 0.5 ACC/MVM (1993 speed survey). There were 4 accidents shown in the previous survey and this survey shows 1 accident which was not speed related.

The following speed limits are appropriate:

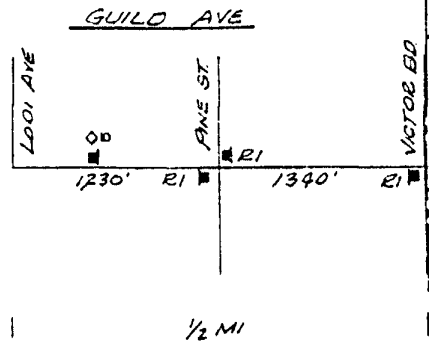
<u>Lodi Avenue Segment</u>	<u>Existing Speed Limit</u>	<u>Recommended Speed Limit</u>
West City Limits - Ham Lane	40 mph	no change
Ham Lane - Beckman Road	30 mph	no change
Beckman Road - Guild Avenue	35 mph	40 mph

Jack L. Ronsko  
Public Works Director

JLR/lm

# ENGINEERING AND TRAFFIC SURVEY

SEE NARRATIVE FOR  
BACKGROUND INFORMATION

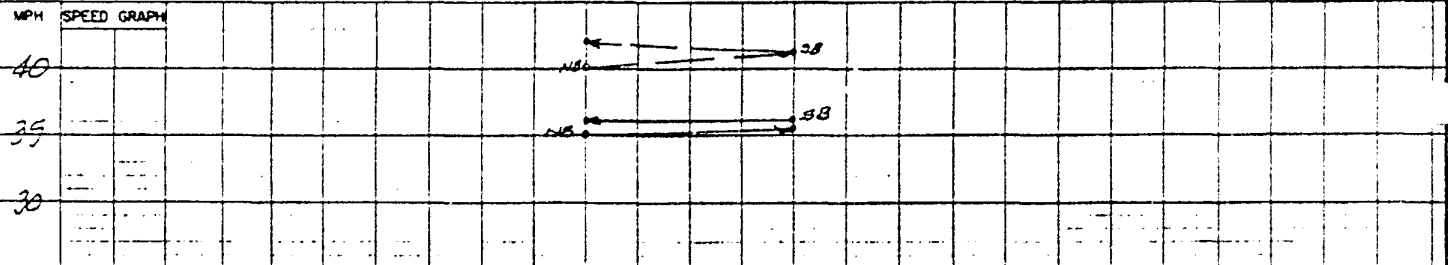


## SPEED TABLE

ROADWAY WIDTH	64'
NO. OF LANES	2 LANES
MEDIAN (TYPE)	NONE
TRAFFIC SIGNAL DATA	NA
AVERAGE DAILY TRAFFIC	1200 2200
OBS. SPEED - CRITICAL .85%	40 43
- PACE (%)	29.38 (23) 31.40 (63)
- MEDIAN .50%	31.40 (61) 33.82 (64)
	35 36
	32 37
EXISTING SPEED ZONE	NONE - NEW CONSTRUCTION
PROPOSED SPEED ZONE	40 MPH

## LEGEND:

- T - SIGN LOCATION
- R1 - STOP SIGN
- R2 - SPEED LIMIT SIGN (MPH)
- R39 - YIELD SIGN
- C - INSTALLATION C (SCHOOL 25 MPH SIGNS, R63, R2(25), R72)
- ⊙ - TRAFFIC SIGNAL
- - CITY LIMIT
- - CRITICAL SPEED
- - LOWER LIMIT OF PACE
- ◇ - ADVISORY SPEED LIMIT (MPH)



ACCIDENT PLOT YR: 1991  
YR: 1992

OPENED TO TRAFFIC ON 11-91

ACCIDENT RATE - ACC/MILL VEH.-MI.  
Dr. JC  
CR. JTF  
Date 12

Approved By  
Public Works Director  
Date

CITY OF LODI  
PUBLIC WORKS DEPARTMENT

GUILD AVE

SPEED  
ZONE  
SURVEY

86 B 004

January 1993

SPEED ZONE REPORT - Guild Avenue

° REFERENCE

Speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802(b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manual.

° STUDY

Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are prevailing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds)

Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five mile per hour increment below the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgement may indicate the need for a further reduction of five miles per hour.

Four radar surveys were performed and the 85th percentile speeds ranged from 40 to 44 mph as shown below:

<u>Guild Avenue Segment</u>	<u>Northbound</u>	<u>Southbound</u>
Lodi Avenue - Pine Street	40 mph	44 mph
Pine Street - Victor Road	43 mph	43 mph

Unexpected Conditions

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks. Speed was not further reduced due to unexpected conditions.



Accidents

Accident records of the two most recent years were considered in determining speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Guild Avenue has recently been constructed and opened to traffic in November 1991. There were no accidents in 1992.

° CONCLUSION

Lodi Avenue to Pine Street to Victor Road

A posted speed limit of 40 mph is appropriate based on the 85th percentile speeds observed in the field. It is not recommended to further reduce the speed limit due to unexpected conditions or accident data.

There is no existing speed limit and the recommended speed limit is shown below:

GUILD AVENUE SEGMENT

RECOMMENDED

Lodi Avenue - Pine Street  
Pine Street - Victor Road

40 mph  
40 mph

Jack L. Ronsko  
Public Works Director

JLR/TC/lm

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RESOLUTION NO. 93-21

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A RESOLUTION OF THE LODI CITY COUNCIL  
APPROVING SPEED LIMIT MODIFICATION ON LODI AVENUE,  
FROM BECKMAN ROAD TO GUILD AVENUE, AND ON GUILD AVENUE, FROM LODI  
AVENUE TO VICTOR ROAD, THEREBY AMENDING TRAFFIC RESOLUTION NO. 87-163

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RESOLVED, that the Lodi City Council does hereby amend Traffic  
Resolution No. 87-163, Section 7 - Speed Limits - and does hereby  
approve the speed limit of 40 miles per hour on Lodi Avenue, from  
Beckman Road to Guild Avenue, and on Guild Avenue, from Lodi Avenue to  
Victor Road.

Dated: January 20, 1993

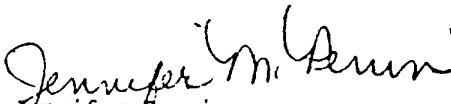
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I hereby certify that Resolution No. 93-21 was passed and adopted  
by the Lodi City Council in a regular meeting held January 20, 1993 by  
the following vote:

Ayes: Council Members - Mann, Sieglock, Snider,  
Pennino (Mayor)

Noes: Council Members - Davenport

Absent: Council Members - None

  
Jennifer Perrin  
City Clerk

93-21

RES9321/TXTA.02J